

**DESCRIPTION OF *DISIPHON*, NEW GENUS, AND ITS TYPE SPECIES,  
*ASTEROCHITON DUBIENUS* BONDAR (HOMOPTERA, ALEYRODIDAE)**

LOUISE M. RUSSELL

USDA, Plant Sciences Institute, Systematic Entomology Laboratory, Room 6, Building 004, BARC-W, Beltsville, Maryland 20705.

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*Abstract.*—*Disiphon*, new genus, is described, *Asterochiton dubienus* Bondar is re-described and designated the type species of the genus. The species was found on *Psidium guajava* L. in Brazil. Characters are given for distinguishing *Disiphon* from other genera.

*Key Words:* Aleyrodidae, *Disiphon*, dorsal glands, Brazil

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The description of *Disiphon* establishes a new genus for *Asterochiton dubienus* Bondar, a Neotropical species whose morphological characteristics differ from those of the genera to which it has been assigned previously. A redescription of *dubienus* aids in the recognition of the species.

***Disiphon* Russell, NEW GENUS**

Type species.—*Asterochiton dubienus* Bondar, by designation and monotypy.

Bondar (1923) placed *dubienus* in *Asterochiton* Maskell following the erroneous application of that name by Quaintance and Baker (1914). He (1928) transferred it to *Trialeurodes* Cockerell after discovering that Quaintance and Baker (1915) had corrected their earlier misuse of the two generic names.

Study of *dubienus* shows that it is not congeneric with *pergandei* Quaintance, the type species of *Trialeurodes*, or any other described genus, and thus merits a new generic placement.

*Etymology.*—*Disiphon*, masculine gender, is from the greek di, two, and siphon, tube, and refers to the two shapes of glands on the dorsum of the pupal case, the only known form of the genus.

*Description.*—Body somewhat oval in

outline, flat dorsally and ventrally, membranous, pale.

*Margin and submargin.*—Margin dentate. Anterior and posterior marginal setae present. Submargin not separated from dorsal disk.

*Dorsum.*—A weak submedian ridge on thorax and anteriorly on abdomen. Median molting suture reaching body margin; transverse suture extending laterocaudad, area between its arms inverted V-shaped. Intersegmental sutures poorly defined; 8 segments present in median area of abdomen. Submedian depressions faint or invisible. Pockets shallow. Submedian cephalic, mesothoracic, metathoracic, eighth abdominal and caudal setae present. Glands of two shapes, each with a pore and porette in or near distal end. Vasiform orifice near mid-length of abdominal segment VIII, subcircular or cordate; operculum nearly covering the orifice and lingula; lingula spatulate with minute spinules and a pair of minute setae. Caudal furrow and caudal ridges absent.

*Venter.*—Antennae 1-segmented, extending toward base of anterior legs, their apices obscure in available specimens. Rostrum possibly 1-segmented, setae or setal bases not observed near apex or anterior to

rostrum. Legs weakly 2-segmented, minute setae or setal bases not observed near disks, posterior pair much stouter than other legs. Adhesive sacs not observed. Tracheal folds obscure. Thoracic and posterior abdominal spiracles minute, anterior abdominal ones not observed. Abdominal setae or setal bases present.

Discussion.—This description is based on three specimens representing three species, of which only *dubienus* has been described. The availability of the undescribed species, from Peru and Venezuela, aided in the delineation of the genus. All specimens are too imperfect to permit a completely satisfactory description of the species.

*Disiphon* resembles *Siphoninus* Silvestri in shape, texture of the derm and in having siphonlike glands. It can be separated from *Siphoninus* and other known genera by the following combination of characters: submedian mesothoracic and metathoracic setae present, first abdominal and elongate submarginal setae absent, a submedian ridge on the thorax and anteriorly on the abdomen, area between arms of the transverse molting suture inverted V-shaped, siphonlike glands of two shapes, operculum nearly covering the vasiform orifice.

*Disiphon dubienus* (Bondar)

(Figs. 1–5)

*Asterochiton dubienus* Bondar 1923: 179–180, Costa Lima 1928: 101.

*Asterochiton dupien*(!) Bondar 1923: 179.

*Trialeurodes dubienus* (Bondar) 1928: 31; Costa Lima 1930a: 86, 1930b: 42, 1936: 159; Mariconi and Soubihe Sobrinho 1961: 37; Silva et al. 1968: 119.

*Trialeurodes dubiensis*(!) (Bondar), Mound and Halsey 1978: 200.

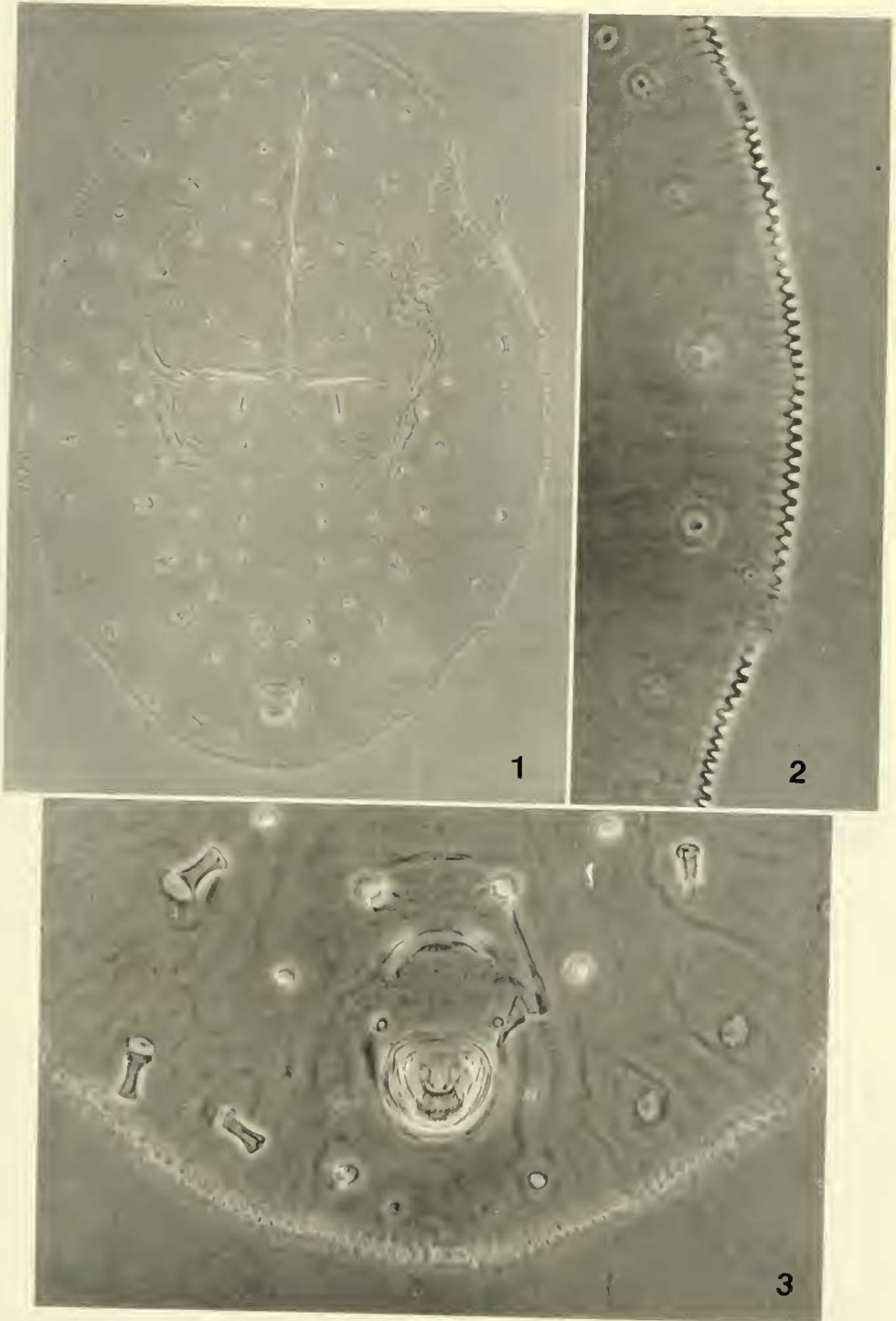
Appearance in life unknown.

Body oval in outline, 0.78 mm long, 0.52 wide, yellowish (Bondar 1923).

Margin and submargin.—Anterior marginal setae 14  $\mu$  long, bases 50 teeth apart, posterior setae broken, bases 60 teeth apart.

Teeth somewhat triangular, as long as basal width; narrowly rounded apically, 17–20 in 100  $\mu$ , 3 or 4 at tracheal pore areas slightly larger than others. A minute pore in notch between teeth or in base of some teeth. Submarginal ridges weak, approximately as long as teeth. Minute setal bases near distal end of some ridges, 3 on prothorax, 1 on each of abdominal segments II and III.

Dorsum.—Median molting suture with midlength section of one side expanded outward and transversely ridged; transverse molting suture extending laterocaudad from midpoint to abdominal segment IV or V. Submedian ridge curved outward, extending from prothorax to abdominal segment III. Cephalothoracic suture indistinct; mesometathoracic suture well defined, other intersegmental sutures usually defined in median and submedian areas. Submedian depressions not observed. Pockets very shallow. Median length of cephalic segment slightly greater than combined length of thoracic segments; abdominal segment I slightly longer than II which is subequal to III–VII; VIII as long as combined length of IV–VII. Siphonlike glands of two shapes, elongate subcylindrical and short thimble-shaped; subcylindrical glands 16–20  $\mu$  long, 8–10  $\mu$  in diameter at ends, 6–7  $\mu$  at midlength; thimble-shaped glands 8–10  $\mu$  in length and diameter; glands arranged approximately as follows: 15 elongate subcylindrical subdorsal on one half of dorsum, 15 normal + 1 modified subcylindrical on other half; on each half, 6 subcylindrical outer submedian, 11 thimble-shaped central submedian and 9 thimble-shaped inner submedian. Minute, thick rimmed pores without associated porettes arranged approximately as follows on each half of body: cephalic segment 3 or 4 subdorsal; prothorax, meso- and metathorax each 1 or 2 subdorsal, 1 or 2 submedian; abdominal segments II and IV–VII each 0 or 1 central subdorsal or submedian. Submedian cephalic and mesothoracic setae slender, tapering, each about 24  $\mu$  long; metathoracic



Figs. 1-3. *Disiphon dubienus*. 1, pupal case (holotype); 2, section of margin, submargin and outer subdorsum; 3, posterior part of abdomen, subdorsal clear areas on right showing where subcylindrical glands were broken off.



Figs. 4, 5. *Disiphon dubienus*. 4, section of median and submedian area showing submedian ridge, parts of thoracoabdominal and transverse molting sutures, cephalic, mesothoracic and metathoracic setae, subcylindrical and thimble-shaped glands, and dark rimmed pore above posterior subcylindrical gland; 5, section of median area of cephalothorax showing folded, ridged area of median molting suture, thimble-shaped glands and cephalic setae.

stouter, broken but at least  $25\ \mu$ , their bases slightly tuberculate; eighth abdominal setae broken at base, located laterocephalad of vasiform orifice, just distad of an imaginary longitudinal line through lateral margins of orifice; caudal setae broken at base, slightly closer to body margin than to vasiform orifice. Vasiform orifice slightly nearer seventh abdominal suture than posterior body margin, subcircular,  $36\ \mu$  long and wide; rim  $4\ \mu$  long across anterior end of orifice, thin and rising slightly above orifice elsewhere; inner walls with fine, narrow, vertical ridg-

es, bottom smooth and extending slightly anterior to posterior margin of operculum; operculum subcircular,  $28\ \mu$  long and wide; lingula extending to end of operculum.

Redescribed from a pupa case labeled "*Trialeurodes dubienus* n. sp. type Coll. Bondar." This specimen was collected from a leaf of goyabeira [*Psidium guajava* L., Myrtaceae] by G. Bondar. The species was described from one specimen.

The references to *T. dubienus* by Costa Lima, Mariconi and Soubihe Sobrinho, Mound and Halsey and Silva et al. cite only

Bondar's collection record. Later collections have not been recorded.

*Siphoninus blanzyi* Cohic (1968), a species not available for examination, is similar to *dubienus* in having siphonlike glands of two shapes.

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